Teaching and Learning with ICT Tools:
Issues and Challenges from Teachers'Perceptions

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Abstract

Over the last several decades, there has been a shift in educational theory and practise to reflect the shifting values of modern society. Revisions are being made to teacher education programmes to create way for these cutting-edge methods. It stands to reason that new educational approaches should be included into both initial teacher training and ongoing professional development. Instructors need to have the right mindset in addition to the necessary teaching skills. We can all agree that training courses have a responsibility to provide their students with the knowledge and experience they need to thrive in the professional world. Some of the most recent developments in teacher education include an interdisciplinary focus, the introduction of correspondence and orientation programmes, and the expansion of opportunities for online learning. Future educators are also trained by other means, such as simulated teaching, micro teaching, programmed instruction, and team teaching. The field of education is now using action research to train future educators. Access to ICT is crucial for educators to maintain relevance in today's society, since it unlocks the door to a wealth of knowledge. As a result, instructors are better able to incorporate the most recent findings from cutting-edge studies in the fields of education and evaluation into their own classroom practises.

Keywords: ICT, Teaching , Learning,*Shared learning resources,Autonomous Learning*

Introduction

The teachers of the English language are often made aware of new practises since many individuals are now paying a lot of attention to the ways in which technology may be used to enhance different language talents. Workshops and shorter trainings, in addition to formal revisions to the curriculum, which are typically approved by the Ministry of Education in each nation, provide new methods, activities, and resources that can be used in the classroom. These revisions to the curriculum are typically approved by the Ministry of Education in each nation. Therefore, teachers of English as a second language are used to making regular modifications to their lessons; nevertheless, this does not always mean that they are more creative or open to new ideas. Since the 1960s, students of foreign languages have had the opportunity to learn with the assistance of technological implements in the classroom, such as TVs, tape recorders, and video recorders. It took about one generation for people to forget the challenges associated with technical skills, despite the fact that there were several signals in the beginning that there were issues with technical abilities. However, teachers have to struggle with a variety of obstacles, which makes it difficult for them to utilise information and communications technology (ICT) in the classroom or to use ICT to generate extra materials. These difficulties make it more difficult for students to learn using ICT. This study's overarching objective is to ascertain the perspectives of high school English teachers on the obstacles that prohibit them from making use of information and communication technology (ICT) in the classroom.

Shared learning resources

The integration of ICT into the classroom has the potential to improve pedagogy and student outcomes. Across the board, students' "Knowledge Comprehension," "Practical skill," and "Presentation skill" scores improved when educational ICT was included into the curriculum, as determined by researchers at Japan's National Institute of Multimedia Education(NIME). Technology in the classroom may help teachers better transmit challenging topics to students and assess whether or not they have grasped those concepts. The term "information and communications technology" (ICT) usually conjures images of sophisticated electronic equipment. Traditional media such as radio, television, and the telephone are also considered part of ICT. People often combine many forms of technology in today's linked society. Telecommunications technology like satellites, the Internet, and video conferencing make it

possible to have face-to-face conversations with people who are geographically far apart. With the help of today's information and communication technology, barriers caused by distance, time, and location may be broken down.

Shared learning spaces

Students may work together on projects, communicate with their teachers and classmates, and have access to a variety of knowledge housed in both local and distant databases by using the Internet and other networked computers in the classroom. Broad Clyst Primary School in East Devon has students as young as eight using networked software to conduct one-on-one and group talks with the teacher and classmates, and students as old as ten having e-mail chats with "pen pals" in other countries. Students may improve their skills in areas as varied as literary writing, keyboarding, and written communication while expanding their knowledge of other cultures and languages via the use of these standardised resources. Children may utilise the keyboard as a tool for social and intellectual development in the greatest constructivist tradition, by establishing bridges between their internal worlds and the external worlds they interact with (Vygotsky, 1962). Children quickly learn the skills required to engage with modern technology because the environment is encouraging and safe, and there are clear and tangible benefits to using them.

The move towards autonomous learning

In addition to encouraging more autonomy in the classroom, the use of computers has been shown to improve students' performance on standardised tests. It is inevitable that the teacher-student relationship will change as a result of the use of ICT in the classroom since students will have more say over their learning environment.

It's expected that students will have greater say in determining their own learning objectives, with teachers serving in more of a facilitative capacity . This kind of facilitation will have many moving parts and will significantly shift the role of the conventional educator. Devon schoolkids, for example, use their free time to utilise a virtual music studio to create their own CDs from scratch, complete with mixing and mastering. We have purchased equipment like keyboards and microphones to encourage the children's budding creativity in these extracurricular activities. Less vigilance on the part of educators is warranted.

The exponential growth of computing power ensures that ICT will become standard in the classroom. There will be many positive outcomes for both students and teachers as a result of this shift. These include more chances for group projects and research, easier access to resources, and innovative new methods of teaching. As a result of increased demands brought on by ICT, teachers will need to adjust their roles accordingly. Many will move on to careers as educators in distributed and online learning, digital media, and other fields. As a result of increased access to ICT, students will develop critical thinking skills and the capacity to effectively express themselves in written and spoken forms. In addition, with the aid of ICT, our children will be well-equipped to succeed in today's high-tech world.

Barriers for Using ICT in the Classroom

It's not easy to find ways to use ICT in the classroom. A number of restrictions prevent ICT from fully supporting educational goals. There is a real risk of information overload in a classroom setting where access to information is almost infinite if teachers lack a coherent plan for organising it or are unable to filter content for relevance. Both students and teachers may lack the skills essential to effectively seek out, process, and apply information. Educators face a variety of challenges when trying to use ICT in the classroom, despite its clear benefits. According to Schoepp, a barrier is anything that stands in the way of progress or the realisation of a goal. Educators have sorted the various obstacles to using ICT in the classroom into several groups. Some research has divided up roadblocks into two main groups: external and internal. Access, time, help, money, and training are all examples of first-order barriers that may be cited by Ertmer. Second-order hurdles, he said, include people's own thoughts and ideas as well as their own actions and those of others. Extrinsic obstacles, as defined by Al-Alwani, are those that arise from outside the classroom and have more to do with systems and procedures than with the instructors, administrators, and students themselves. Organizational context helps differentiate extrinsic from internal limitations. Other studies have shown that the challenges may be broken down into two groups: those at the level of the teacher, and those at the level of the institution. Individual (barriers at the teacher level), such as a lack of confidence, a lack of time, and resistance to change; and institutional (barriers at the school level), such as a lack of effective training in solving technical problems and a lack of access to resources, were identified by Becta as the two main types of challenges. Micro level obstacles are concerns related to how teachers think about and use ICT; meso level barriers involve issues related to the school's

surroundings . They also developed a third group, "macro level barriers," to describe the larger problems that can't be solved by focusing on smaller issues. Things like the whole educational system fell under this heading. Another group of academics classifies the challenges into material and non-material categories. The lack of adequate hardware or software is the "material conditions," as defined by Pelgrum. A lack of ICT knowledge and skills among educators, the challenge of implementing ICT in the classroom, and a lack of time to create courses that make use of ICT are all examples of the non-material barriers that educators face when attempting to integrate ICT into their teachings.

ICT for Diagnostic Testing and Remedial Teaching

The majority of teachers report that their pupils either have trouble retaining information or quickly forget what they've learned. Teachers seldom administer diagnostic tests or give remedial instruction because of a variety of factors including but not limited to student numbers in classes, teachers' lack of training, resources, and motivation, and so on. In this scenario, the usage of ICT may assist both educators and students in identifying the root of the issue. If the school allows for online assessments, then students may do their work at their leisure without having to go to school. They can keep an eye on their kids' activities if they want to. It may be difficult to come up with a uniform method for fixing the discovered faults across all children, since they may differ in severity and kind. Individualized rehabilitation programmes may be developed, organised, and put into action with the use of information and communication technologies. A combination of online and in-person instruction is possible for these courses.

Multimedia

The use of multimedia in classrooms has become more common in recent years. Multimedia presentations are presentations that mix many media types, such as text, colour, graphics, animation, music, and video. The usage of multimedia in the classroom benefits both teachers and pupils. Multimedia may be defined as "a display of information that incorporates numerous media such as text, music, graphics, and animation." The potential of multimedia as a teaching and learning tool has been recognised for a long time, and teachers have seized upon it. This is because in a computer-mediated setting, students may read, watch, and complete assignments. It may serve as a source of inspiration and drive for students and propel them toward their academic objectives in unexpected ways. Users of

multimedia material, in contrast to those using more conventional pedagogical methods, may often put themselves in the shoes of the characters they are learning about.

Internal barriers to ICT implementation in schools in rural locations include:

An important obstacle to using ICT in rural schools is the lack of qualified teachers. Educators who are both enthusiastic and well-versed in information and communication technologies are in short supply. In addition, there is a severe lack of consistent, high-quality training for teachers who are responsible for imparting ICT instruction.

Due to the country's unfavourable organisational culture and insufficient attitudes and beliefs, educational institutions and school administration in developing nations frequently fail to recognise the relevance and seriousness of the role of ICT in promoting education. In addition, the instructors' views and morals are conservative and antiquated. Since they are stubborn and unwilling to learn, they always remain behind the times. They doubt the usefulness of ICTs in the classroom and hold the false belief that youngsters are not the intended audience for these tools.

Time constraints: teachers often have to focus on other things than instructing their students. They must also integrate lessons in ICT with lessons in a broad variety of other subjects. There is not enough time for educators to develop and implement new technology tools.Instructors need time to collaborate, master new tools, and keep up with technological advances.Not enough money: Access to appropriate and modernised hardware and software infrastructure is crucial to the efficacy and productivity of technological applications. It takes a huge commitment of time, energy, and money to effectively introduce technology into educational institutions in developing countries.

Issues with both language and subject matter- It's no surprise that the majority of worldwide educational software is created in English. In general, English is the language most often used to access online information. Many developing countries struggle to use ICT for educational reasons due to a widespread lack of English proficiency, especially outside of large cities.

Crucial external barriers in the implementation of ICT in rural schools are:

A common problem in government schools in less populated areas is a shortage of hardware and software essential for modern classroom instruction. There is not enough computer availability for students. In certain locations, access to private schools is quite limited. A lack of interoperability between complementary resources and the improper mix of those resources may be to blame for the inadequate ICT understanding and delayed technology adoption in these schools. Poorly Reliable Technology - A common problem in rural schools is the unreliability of even the most basic types of ICT and computer resources. Classrooms often lack easy access to up-to-date computer facilities. A lack of up-to-date and functional hardware is a major barrier to the mainstream adoption of ICT.

Due to a lack of technological support, rural schools have difficulties in areas like technical knowledge, a shortage of ICT service centres, and a scarcity of qualified technical workers. A variety of technical support specialists, either employed by or contracted by the institution, are essential to the effective implementation of ICT. The inability to get quick onsite technical support means organisations may waste time and money fixing broken systems. Maximizing the use of computers in the classroom has been hindered by the lack of easily accessible technical support.

Rural schools sometimes have trouble with internet and other resources. Computers, printers, and other office machinery are included here, as are more specialised items like scanners, smart boards, and multimedia players. Although Internet connection is crucial for ICT, it is sometimes insufficient in remote schools. Because of the high rates charged by internet service providers, most schools are unable to offer adequate internet connection for their students.

Other external issues such as social and cultural considerations specific to these areas, a lack of effort on the part of community leaders, corruption, and burglary all work against the use of ICT in rural schools.

There is no longer any relevance to national boundaries thanks to the proliferation of globalised information and communication networks. The scenario takes for granted that liberalising education is among the services that must be done to enable international trade. As it aims to become a knowledge economy, India is growing more reliant on information and communication technologies. Efforts to close the supply-and-demand divide in education have prompted new rules mandating the wise use of information and communication technology.

Conclusion

Many individuals nowadays see the use of technology in education as a way to impose their own favoured pedagogical and methodological approaches on pupils. However, it is more difficult to use ICT in the classroom since teachers must have specialised expertise. Furthermore, there are obstacles to integrating ICT in the classroom and developing ICT-based supplemental materials that teachers must overcome. These findings confirm that high school teachers have a strong grasp of and comfort with ICT, but this is not the same thing as saying that they routinely use it into their lessons. Internet and other forms of information and communication technology (ICT) are in short supply, and few schools have the means to give teachers with the technical support they need to make effective use of these tools in the classroom. Additional difficulties with integrating ICT into the curriculum include time limits in the classroom and the time needed to become skilled in the use of ICT. If teacher preparation programmes provide their students access to adequate materials and instruction, they may be able to contribute to the integration of ICT. On the other hand, teachers must pay attention to what is happening in their classrooms. The long-term success of educational efforts may depend on the efficient use of information and communication technologies in the classroom.

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